RF SPECIALTIES ELEVATION PATTERN ERI FMLDA - 2

DATE: MAY 27, 1992 RMS GAIN= .9971 PROGRAM NO. FMP
BEAM TILT= 0%
NULL FILL= 0%

95.9 mHz

FREQ:

PLOT PREPARED FOR: VICTORY/SEELYVILLE

.9 .1 ELEVATION FIELD . 2 .4 .5 .7 . 8 1.0 .3 .6 20.00 .437 18.00 .527 16.00 .613 .695 14.00 12.00 .770 10.00 .836 8.00 .893 .939 6.00 .973 4.00 2.00 .993 0.00 1.000 .993 -2.00 .973 -4.00 -6.00 .939 -8.00 .893 .836 -10.00 .770 -12.00.695 -14.00 .613 -16.00 .527 -18.00 -20.00 .437 -22.00 .347 -24.00 .257 .169 -26.00 .084 -28.00 -30.00 .004 : * -32.00 .069 : .137 -34.00-36.00 .197 -38.00 .249 .294 -40.00 .331 -42.00 -44.00.361 .383 -46.00 -48.00 .399 .408 -50.00 -52.00 .412 -54.00 .410 -56.00 .405 -58.00 .396 -60.00 .383

DIRECTIONAL ANTENNA CHARACTERISTICS

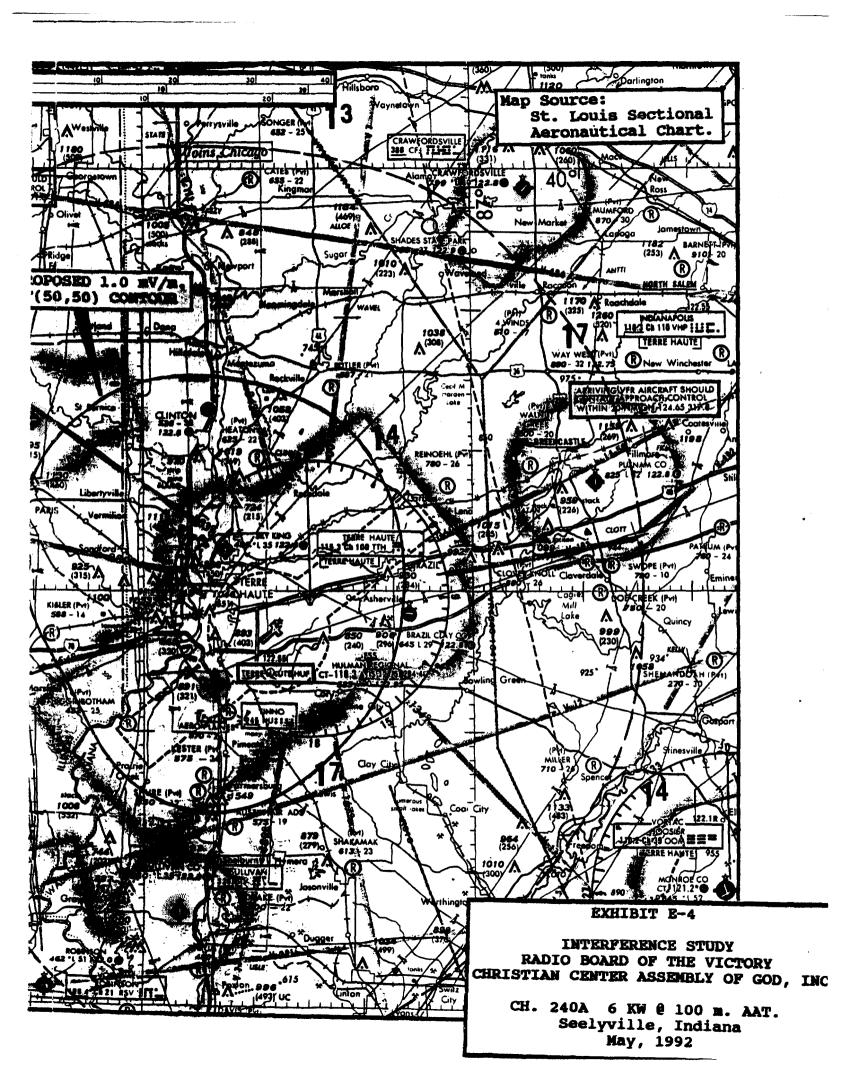
- 1. The antenna will be side mounted on the tower. The method of mounting on the tower will be coordinated with the antenna manufacturer and will be totally in accordance with the antenna manufacturer's instructions as specified in Sec. 73.316(c)(5) of the Commission's Rules and Regulations.
- 2. The antenna will not be mounted on the top of an antenna tower which includes a top-mounted platform larger than the nominal cross-section of the tower in the horizontal plane as specified in Sec. 73.316(c)(6) of the Commission's Rules and Regulations.
- 3. No other antennas of any type will be mounted on the same tower level as the directional antenna. No antenna of any type will be mounted within the horizontal or vertical distance specified by the antenna manufacturer as necessary for proper directional operation in accordance with Sec. 73.316(c)(7) of the Commission's Rules and Regulations.

EXHIBIT E-3

The allocation is "grandfathered" under Section 73.213 of the Commission's Rules and Regulations at 3.0 KW. with an antenna height of 100 meters. It is not possible to increase power to 6.0 KW. at 100 meters due to short-spacings to either Effingham, Illinois or to Franklin, Indiana.

Significant difficulties have been involved in seeking a fully spaced transmitter site which would be acceptable to the Federal Aviation Administration. In this particular instance, the Federal Aviation Administration has advised the proponent by letter that it was probable that a Hazard Determination would be issued for the currently proposed site. To avoid the Hazard Determination and the subsequent difficulty in obtaining a construction permit, the proponent has elected to move to a new site on an existing authorized tower. The move to that tower does cause a minor short-spacing situation to FM broadcast station WCRC at Effingham, Illinois. However, contour protection adequately eliminates any possible interference to or from that facility.

The proposed site will still provide a city grade signal over the entire city of license and will minimize environmental considerations through location on an existing tower.



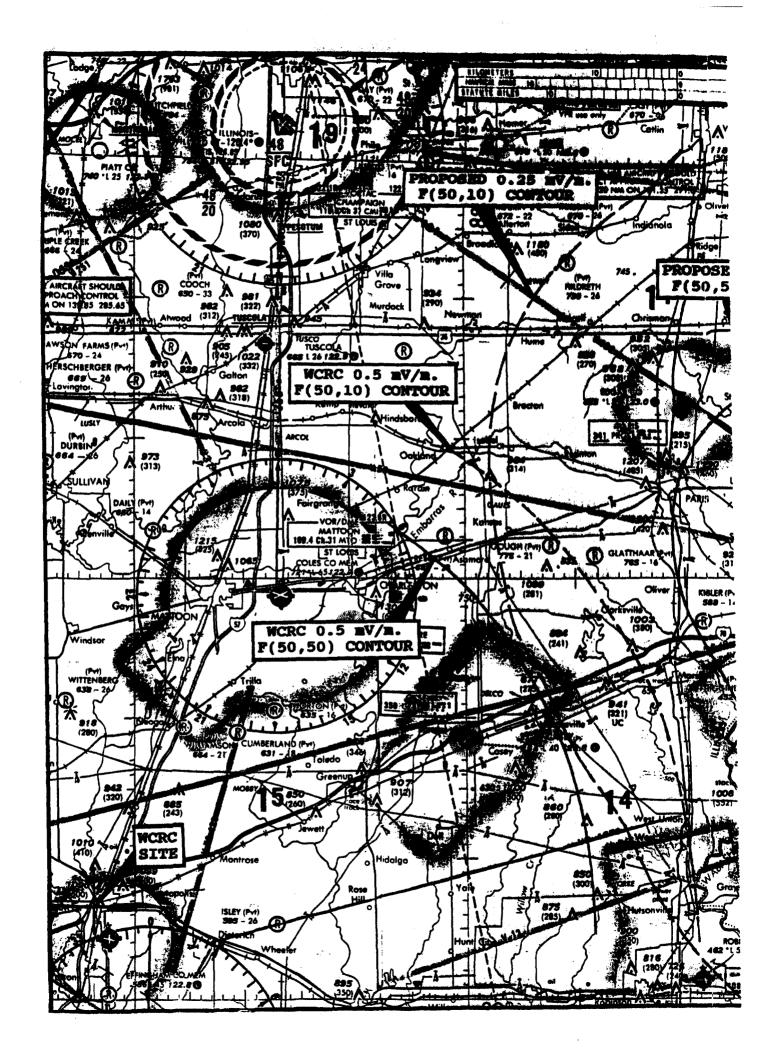
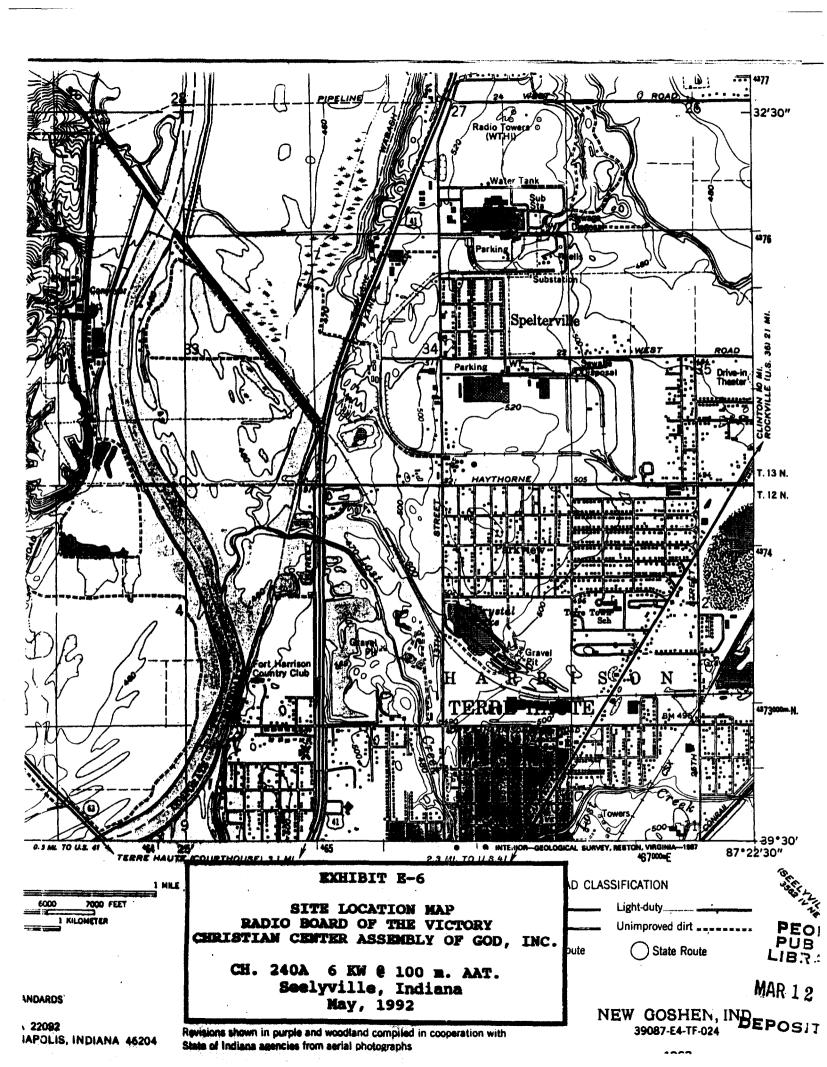
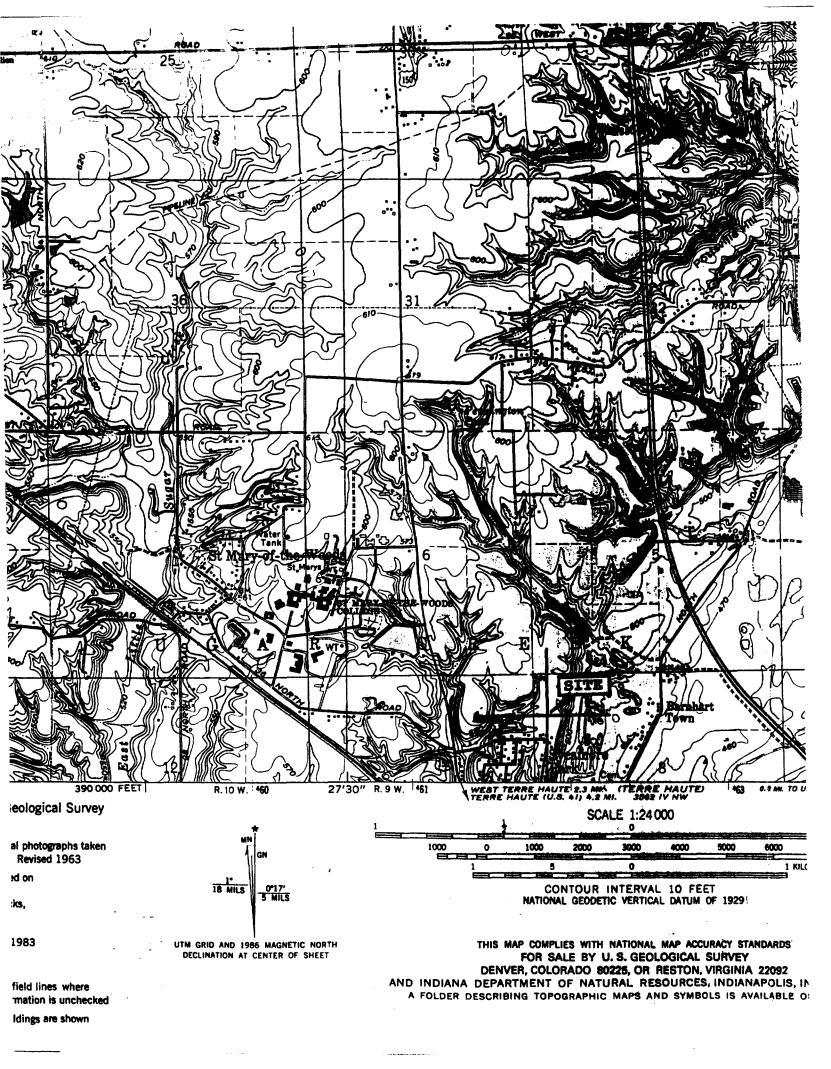
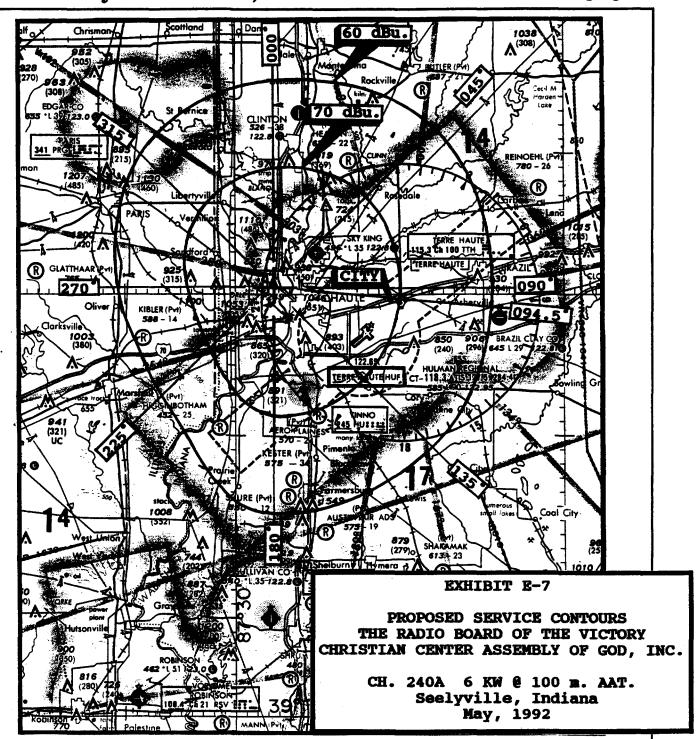


EXHIBIT E-5

The facility would be located on a tower currently occupied by two FM broadcast stations and by multiple business band and industrial users. Spectrum analysis measurements will be performed before the proposed facility is placed into operation and following the starting of equipment tests. If any spurious signals are determined to result from the joint operation of the proposed facility with those existing facilities, the applicant will provide filters as necessary to eliminate all such spurious signals.







KILOMETERS		1	0	\Box	Ш		П	\perp	L	0	10	20	30	40
NAUTICAL MILES 10						Ι_	Ι			0		10		0
STATUTE MILES	10		$\neg I$		\Box	T				0	10		20	-

Map Source: St. Louis Sectional Aeronautical Chart **** ANSI STANDARD REPORT FOR VICTORY ****

Horizontal ERP= 6 kW

Vertical ERP= 6 kW

Center of radiation above ground= 93 meters Bottom bay above ground= 91.5 meters

Worst case power density from C. OF RAD. = 0.0464 mW/square centimeter FM RADIATION IS 4.64 PERCENT OF ALLOWABLE

Worst case power density from BOTTOM BAY= 0.0479 mW/square centimeter FM RADIATION IS 4.79 PERCENT OF ALLOWABLE

RESTRICTED AREA begins 20.0 meters below the VICTORY antenna bottom bay OR 71.5 meters above ground

**** ANSI STANDARD REPORT FOR WZZO *****

Horizontal ERP= 25 kW

Vertical ERP= 25 kW

Center of radiation above ground= 201 meters Bottom bay above ground= 193 meters

Worst case power density from C. OF RAD. = 0.0413 mW/square centimeter FM RADIATION IS 4.13 PERCENT OF ALLOWABLE

Worst case power density from BOTTOM BAY= 0.0448 mW/square centimeter FM RADIATION IS 4.48 PERCENT OF ALLOWABLE

RESTRICTED AREA begins 40.9 meters below the WZZQ antenna bottom bay OR 152.1 meters above ground

**** ANSI STANDARD REPORT FOR WCRT ****

Horizontal ERP= .55 kW

Vertical ERP= .55 kW

Center of radiation above ground= 91 meters Bottom bay above ground= 90 meters

Worst case power density from C. OF RAD. = 0.0044 mW/square centimeter FM RADIATION IS 0.44 PERCENT OF ALLOWABLE

Worst case power density from BOTTOM BAY= 0.0045 mW/square centimeter FM RADIATION IS 0.45 PERCENT OF ALLOWABLE

RESTRICTED AREA begins 6.1 meters below the WCRT antenna bottom bay OR 83.9 meters above ground

****** FM SUMMARY *******

Total power density from FM antennas (C. O. R.)=0.0921 mW/square centimeter Total power density from FM antennas (BOTTOM BAY)=0.0972 mW/square centimeter

TOTAL RADIATION FROM FM ANTENNAS (C. O. R.) IS 9.209999 PERCENT OF ALLOWABLE TOTAL RADIATION FROM FM ANTENNAS (BOTTOM BAY) IS 9.719999 PERCENT OF ALLOWABLE

NOTE: RESTRICTED AREA is defined for each individual FM antenna

RF RADIATION EXPOSURE PREVENTION PROCEDURES

The applicant agrees to the following measures which will assure compliance with OST Bulletin No. 65 entitled "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation". A restricted area will be established beginning at a point outside the area where the guidelines may be exceeded, either at ground level or at an elevation above ground level.

MEASURES TAKEN TO PROTECT THE GENERAL PUBLIC:

The center of radiation and bottom bay of the FM antenna is or will be at a height above ground greater than the value listed in Table 1 of OST Bulletin No. 65 and will prevent the exposure of humans to RF radiation levels in excess of the American National Standards Institute guidelines (ANSI C95.1-1982). Appropriate measures, including the posting of warning signs which describe the nature of the hazard, will be or have been taken to preclude casual or inadvertent access to the supporting structure.

MEASURES TAKEN TO PROTECT COMPANY EMPLOYEES AND CONTRACT LABOR:

For personnel whose duties require them to enter the restricted area, the following procedure has been or will be instituted to ensure that exposure to RF radiation levels will not exceed the established guidelines:

The nonionizing RF levels at any particular work location will be determined through measurement to determine their exact value. The time-averageing methods described in the ANSI standard will be applied to limit exposure to working personnel, OR

If the levels are too high for such methods or if the time required to be spent inside the restricted area is larger than would be permissible by the averaging method, all emission of RF energy will cease during the work period to the extent that such RF energy would exceed the ANSI guidelines for any time period.

This policy is or will be posted at the access point to the restricted area. Anyone requiring access to the restricted area who feels the duties to be performed may place them at risk of exposure to unsafe levels of RF radiation should not enter the restricted area and are to immediately contact either the General Manager or the Chief Operator.

FAA Acknowledgement of Notice of Proposed Construction

FEDERAL AVIATION ADMINISTRATION Great Lakes Region, AGL-530 2300 East Devon Avenue Des Plaines, IL 60018

In Reply Refer to AERONALITICAL STUDY NO 90-AGL-2260-0E

ACKNOWLEDGMENT OF NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION

PROPONENT: The Radio Board of the Victory Christian Center Assembly of God, Inc. 9400 Webash Avenue

Terre Haute, IN 47803

CONSTRUCTION LOCATION: East Glan IN

39-30-10. LATITUDE : 087-19-01. LONG! TUDE:

HEIGHTE 897.

CONSTRUCTION PROPOSED: Redio Tower FREQUENCY: 95.9 MHz. EFFECTIVE RADIATED POWER (ERP): 6.0 KW

The Federal Aviation Administration acknowledges receipt of notice dated 12/03/90, concerning the proposed construction or alteration described above.

A study has been conducted under the provisions of Part 77 of the Federal Aviation Regulations to determine whether the proposed construction would be an obstruction to air navigation, whether it should be marked and lighted to enhance safety in air navigation, and whether supplemental notice of start and completion of construction is required to permit timely charting and notification to sirmen. The findings of that study are as follows:

The proposed construction would exceed Part 77 obstruction standards and further seronautical study is necessary to determine whether it would be a hazard to air navigation. Pending completion of any further study, it is presumed the construction would be a hazard to air navigation.

Further study may be requested by the sponsor within 30 days of this acknowledgment.

The potential for electromagnetic interference (EMI) exists. See remarks.

If the proposed structure were reduced in height to not exceed 155 ft. above ground level (725 ft. above mean sea level), it would not exceed Part 77 obstruction standards.

If the structure is subject to the licensing authority of the FCC, a copy of this acknowledgement will be sent to that Agency.

>>>> NOTICE IS REQUIRED ANYTIME THE PROJECT IS ABANDONED OR THE PROPOSAL IS MODIFIED TACK

See attachment for electromagnetic interference (ENI) effects. Any height greater than 155'AGL/725'AMSL will have an adverse impact on instrument flight rule (IFR) procedures to Sky King Airport Terre Haute, IN.

Issued In: Des Plaines, Illinois On: 01/24/91

Airspace Case # : 90-AGL-2260-Transmitter Location: EAST GLEN. IN Proponent Frequency: 95.9 MHz

Date: 12-31-15.

The impact of the proposed radio transmitter system on Aeronautical Radio Services is as follows:

Aircraft making a very high frequency omnidirectional radio range (VOR) approach to TERRE HAUTE SKY KING airport utilizing the frequency of 115.3 MHz will be subject to the following hazardous interference:

INTERFERENCE F1 F2 F3 IM Result Threshold TYPE (MHz) (MHz) (MHz) (MHz) (dBm)

VOR OVERLOAD COMMUNICATION OVERLOAD

-10

VOR overload interference occurs whenever the signal from the proponent's transmitter equals or exceeds the threshold level at any point within the FPSV.

* Communication overload interference occurs whenever the signal from the proponents transmitter equals or exceeds -10 dBm at any point within the FPSV.

Ground receivers at HULMAN REGIONAL airport located at TERRE HAUTE, IN are subject to interference.

In order to eliminate spurious interference, the proponent must provide written assurance that the transmitter spurious radiation will be attenuated below the unmodulated carrier level (video carrier if a TV station) in accordance with the table shown below:

Frequency Range

Required Spurious Attenuation (db

148 to 157 1/4

~84

In-band interference occurs whenever the ground communication receiver is subjected to signals greater than or equal to -104 dBm.

MTTITE MELIC

SUPERVISOR SPECTRUM ENGINEERING

AGL 483

90-AGL-2260-GE 12-31-1990 FEBRUARY 5, 1991 Letter Requesting Circularization

D.L. Markley & Associates, Inc.

Consulting Engineers 2104 WEST MOSS PEORIA, ILLINOIS 61604

MEMBER: AFCCE

February 5, 1991

AREA CODE 309 TELEPHONE 673-7511

Federal Aviation Administration Great Lakes Region 2300 East Devon Avenue Des Plaines, Illinois 60018

RE: Aeronautical Study No.90-AGL-2260-OE

Gentlemen:

With regard to the above identified study, the proponent understands that it would be necessary to attenuate all spurious radiation in the frequency range of 118-137 MHz. to a level of 84 dB. below carrier level. The proponent agrees to limit the spurious radiation in that fashion.

Secondly, the proponent understands that there is some concern regarding VOR overload when making a VOR approach to Terre Haute Sky King Airport. The proponent agrees to utilize an antenna with half wavelength spacing between elements. This will greatly reduce the signal above the horizon, thereby greatly reducing the signal transmitted upward into the protected service volume.

It is understood that circularization of this proposal is required. The proponent hereby requests that such circularization be made.

Sincerely yours,

Donald E. Markley, P.E.

DLM:sb

cc:Victory

APRIL 29, 1992 FAA Letter

April 29, 1992

The Radio Board of the Victory Christian Center Assembly of God, Inc. 9400 Wabash Avenue Terre Haute, IN 47803

% Donald L. Markley
D.L. Markley & Associates, Inc.
Consulting Engineers
2104 West Moss
Peoria, IL 61604

REF: Aeronautical Study No. 90-AGL-2260-OE

Dear Mr. Markley:

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Aeronautical study of the proposal to construct a 327'AGL/897'AMSL antenna tower in the vicinity of East Glen, Indiana has been completed.

The proposed structure would be located approximately 3.22 nautical miles north of the Hulman Regional Airport, also 3.89 nautical miles southeast of Sky King Airport, Terre Haute, IN. It would exceed the obstruction standards of the Federal Aviation Regulations, Part 77 as follows:

<u>Section 77.23(a)(3)</u> by 170 ft. - a height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria) for Sky King Airport.

The formal study, which you requested, included circularization of the proposal for public aeronautical comment by letter dated March 11, 1992. Three letters of objection were received as a result of the circular. The Indiana Department of Transportation, Hulman Regional Airport and Brown Flying School, Inc. of Sky King Airport were the respondents. They objected on the basis of an increase in minimum descent altitude on the approach to Sky King Airport at Terre Haute, IN. which would adversely effect instrument flight rules (IFR) traffic into the airport.

The proposal would necessitate the following standard instrument approach procedures (SIAP) revisions/changes at Sky King Airport, Terre Haute, Indiana.

Increase the VOR-A circling SIAP MDA for category aircraft (CAT) A, and B from 1040' AMSL to 1200' AMSL.

The MDA is the minimum altitude to which an aircraft may descend while on the approach to the airport during periods when reduced visibility and/or a low cloud ceiling condition exists. If the pilot cannot achieve visual reference to the ground upon reaching the MDA, the approach must be abandoned. This results in the aircraft having to proceed to an alternate airport or waiting for improved weather conditions.

Study revealed that the Sky King Airport in fiscal year 1990 had 165 (general aviation) utilize the instrument approach procedures under actual instrument weather conditions. This represents a substantial number of aircraft that could be adversely affected. Any increase to an existing MDA to accommodate the proposal would severely impact and reduce the utility of the airport.

Aeronautical study for IFR effect at the Sky King Airport disclosed substantial adverse effect upon IFR operations and procedures. Any increase in MDA's to accommodate the proposed structure would have a significant adverse effect on category A and B aircraft executing VOR-A circling approaches to all runways at Sky King Airport, Terre Haute, Indiana. It was determined that it was not possible to modify the approach to accommodate the proposal, and this is the only approach at this airport.

The administrative procedures of Federal Aviation Regulations, Part 77 require that we issue a formal Determination of Hazard or No Hazard to Air Navigation following the conclusion of the study. The proposal's substantial adverse effect warrants a Determination of Hazard to Air Navigation. Alternatives include reducing the proposed structure to 157'AGL/727'AMSL, relocation to a new site, or withdrawing the proposal. Because airspace determinations are disseminated widely, we shall withhold final processing of this aeronautical study until you have had time to review and reconsider all the pertinent facts regarding your proposal and to reply to this information. If we do not hear from you in writing regarding this matter by May 27, 1992, we will proceed with final action.

If you have any questions, please contact our office at (312) 694-7569.

Sincerely,

Original signed by N RICHARD N. KOCH

Douglas F. Powers, Manager, System Management Branch, AGL-530

CC: AGL-531.5 (wo/enclosures)
 AGL-531 (rf) (wo/enclosures)

AGL-531.5:RKoch:rk:x7569:04/28/92:0E90\90-2260A.PRE

CERTIFICATION OF SERVICE

I, Pamela R. Payne, hereby certify that on this 29th day of May, 1992, copies of the foregoing **PETITION FOR LEAVE TO AMEND** were hand delivered or mailed, first class, postage prepaid, to the following:

Administrative Law Judge John M. Frysiak * Federal Communications Commission 2000 L Street, N.W., Room 223 Washington, D.C. 20054

Robert Zauner, Esquire *
Hearing Branch, Mass Media Bureau
Federal Communications Commission
2025 M Street, N.W., Room 7212
Washington, D.C. 20554

Chief, Data Management Staff *
Mass Media Bureau
Federal Communications Commission
1919 M Street, N.W., Room 350
Washington, D.C. 20554

Stanley G. Emert, Jr., Esquire
Law Office of Stanley G. Emert, Jr.
2318 Second Avenue, Suite 845
Seattle, Washington 98121
Counsel for Crystal Clear Communications, Inc.

Pamela R. Payne

* HAND DELIVERED